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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/630,559

07/30/2003

Livio Ricciulli

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EXAMINER

NGUYEN, MINH CHAU

ART UNIT

PAPER NUMBER

2445

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/630,559	<b>Applicant(s)</b> RICCIULLI, LIVIO	
	<b>Examiner</b> MINH-CHAU NGUYEN	<b>Art Unit</b> 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 55-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 55-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/16/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is responsive to the RCE amendment of the applicant filed on 4/16/09. Claims 55-72 are presented for further examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 55,57-61,63-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiegel et al. (Spiegel) (5,649,108), and further in view of Koyanagi et al. (Koyanagi) (US 7,187,658 B2).
2. Claim 55, Spiegel teaches a method for transmitting content in a communications network between a source node and a destination node, the method comprising:  
configuring a table (i.e. routing table 13) to cause content intended for transmission from the source node to the destination node to be routed from the source node to the destination node via a first path [fig. 1&2; and Col. 5, L. 37-62; and Col. 6, L. 37-67];  
analyzing a cost associated with transmitting content from the source node via the first path with respect to a threshold cost, wherein the threshold cost is based at least in part on the transmission of content from the source node via

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the first path [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6]; and

modifying the table to cause content intended for transmission from the source node to the destination node to be routed from the source node to the destination via a second path based on analysis of the cost against the threshold cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6].

Spiegel fails to teach transmission from the source node to the destination node to be routed from the source node to a first network; a specified amount of time has elapsed; transmission from the source node to the destination node to be routed from the source node to a second network. However, Koyanagi, in the same field of endeavor having closely related objectivity, teaches transmission from the source node to the destination node to be routed from the source node to a first network [Col. 3, L. 45-58; and Col. 5, L. 45-Col. 6, L. 65]; a specified amount of time has elapsed [Col. 6, L. 39-65; and Col. 13, L. 28-50]; transmission from the source node to the destination node to be routed from the source node to a second network [Col. 3, L. 45-58; and Col. 5, L. 45-Col. 6, L. 65].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Koyanagi's teachings of transmission from the source node to the destination node to be routed from the source node to a first network; a specified amount of time has elapsed; transmission from the source node to the destination node to be routed from the

source node to a second network, in the teachings of Spiegel in combined progressive and source routing control for connection oriented communications networks, for the purpose of help to selecting the appropriate network based on the static and dynamic information about the plurality of network and timer, thereby enabling data transmission through the appropriate network.

3. Claim 57, Spiegel and Koyanagi disclose the invention substantially as claimed. Spiegel teaches wherein the modifying step is performed if the cost exceeds the threshold cost [Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6].
4. Claim 58, Spiegel and Koyanagi disclose the invention substantially as claimed. Koyanagi teaches wherein the modifying step comprises: designating a neighboring node in the second network as a next hop [Col. 6, L. 39-Col. 7, L. 2].
5. Claim 60, Spiegel and Koyanagi disclose the invention substantially as claimed. Spiegel teaches wherein the analysis involves comparing the amount of cost against a threshold amount of cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6]. Besides this, Koyanagi teaches comparing the amount of time for transmission between at least two networks [Col. 3, L. 45-58; and Col. 6, L. 39-Col. 7, L. 2; and Col. 13, L. 28-Col. 14, L. 50]

6. Claim 65, Spiegel teaches a method for transmitting content in a communications network between a source node and a destination node, the method comprising:

configuring a table (i.e. routing table 13) to cause content intended for transmission from the source node to the destination node to be routed from the source node to the destination node via a first path [fig. 1&2; and Col. 5, L. 37-62; and Col. 6, L. 37-67];

analyzing a cost associated with transmitting content from the source node via the first path against a threshold cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6]; and

modifying the table to cause content intended for transmission from the source node to the destination node to be routed from the source node to the destination via a second path based on analysis of the cost against the threshold cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6].

in response to the modifying step, analyzing a second cost associated with transmitting content from the source node via the second path against a second threshold cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6];

modifying the table to cause content intended for transmission from the source node to the destination node to be routed from the source node via the first path based on analysis of the second cost against the second threshold cost [fig. 6A-D & 7A-D; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6].

Spiegel fails to teach transmission from the source node to the destination node to be routed from the source node to a first network; a specified amount of time has elapsed; transmission from the source node to the destination node to be routed from the source node to a second network. However, Koyanagi, in the same field of endeavor having closely related objectivity, teaches transmission from the source node to the destination node to be routed from the source node to a first network [Col. 3, L. 45-58; and Col. 5, L. 45-Col. 6, L. 65]; transmission from the source node to the destination node to be routed from the source node to a second network [Col. 3, L. 45-58; and Col. 5, L. 45-Col. 6, L. 65].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Koyanagi's teachings of transmission from the source node to the destination node to be routed from the source node to a first network; transmission from the source node to the destination node to be routed from the source node to a second network, in the teachings of Spiegel in combined progressive and source routing control for connection oriented communications networks, for the purpose of help to selecting the appropriate network based on the static and dynamic information about the plurality of network and timer, thereby enabling data transmission through the appropriate network.

7. Claim 66, Spiegel and Koyanagi disclose the invention substantially as claimed. Spiegel teaches wherein the second threshold cost is based at least in part on

whether a specified cost has exceeded relative to the transmission of content from the source node via the second path [Col. 3, L. 30-59; and Col. 6, L. 37-67; and Col. 10, L. 11-Col. 13, L. 6]. Besides this, Koyanagi teaches a specified amount of time has elapsed relative to the transmission of content from the source node to the second network (i.e. one of a plurality of networks) [Col. 6, L. 39-65; and Col. 13, L. 28-50].

8. Claim 67, Spiegel and Koyanagi disclose the invention substantially as claimed.

Spiegel teaches wherein the threshold cost is based on a cost of link from a node to a next node [Col. 3, L. 60-Col. 4, L. 64 and Col. 10, L. 11-Col. 13, L. 6].

Besides this, Koyanagi teaches a delay metric [Col. 13, L. 28-43]

9. Claim 68, Spiegel and Koyanagi disclose the invention substantially as claimed.

Spiegel teaches wherein the threshold cost is based on a cost of link from a node to a next node [Col. 3, L. 60-Col. 4, L. 64 and Col. 10, L. 11-Col. 13, L. 6].

Besides this, Koyanagi teaches a performance metric (i.e. transmission metric) [Col. 3, L. 45-58; and Col. 5, L. 45-Col. 6, L. 65; and Col. 13, L. 28-43].

10. Claim 69, Spiegel and Koyanagi disclose the invention substantially as claimed.

Koyanagi teaches wherein the first network does not contain the destination node [Col. 5, L. 45-Col. 6, L. 65; and Col. 13, L. 28-Col. 14, L. 50].



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11. Claims 59,61,63,70 are corresponding apparatus claims of method claims 55,57,58,69. Therefore, they are rejected under the same rationale.

12. Claims 64,71 are corresponding claims of claims 55,69. Therefore, they are rejected under the same rationale.

13. Claim 72 is corresponding claim of claim 69. Therefore, it is rejected under the same rationale.

14. Claims 56,62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiegel and Koyanagi as applied to claim 55 above, and further in view of Kamm et al. (Kamm) (5,457,680).

15. Claim 56, Spiegel and Koyanagi are relied upon for the disclosure set forth in the previous rejection. Koyanagi teaches wherein the first network is an Internet service provider (ISP) network [Col. 5, L. 45-Col. 6, L. 65].

Spiegel and Koyanagi fail to teach the first network is an overlay network. However, Kamm, in the same field of endeavor having closely related objectivity, teaches overlay network [Col. 2, L. 52-53].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Kamm's teachings of overlay network, with Koyanagi's teachings of data transmission apparatus selecting

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efficient network or service class, in the teachings of Spiegel in combined progressive and source routing control for connection-oriented communications networks, for the purpose of help to selecting the appropriate network based on the static and dynamic information about the plurality of network and timer, thereby enabling data transmission through the appropriate network.

16. Claim 62 is corresponding apparatus claim of method claim 56. Therefore, it is rejected under the same rationale.

### ***Response to Arguments***

Applicant's arguments filed 4/16/09 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 55-72 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU NGUYEN whose telephone number is (571)272-4242. The examiner can normally be reached on 7AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrice Winder/  
Primary Examiner, Art Unit 2445

/M. N./  
Examiner: Minh-Chau Nguyen, Art Unit 2445